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REMARKS

Reconsideration of the Office Action mailed October 26, 2005, (hereinafter "instant Office Action",) entry of the foregoing amendments, and withdrawal of the rejection of claims 1-32, and 52-88, are respectfully requested.

In the Final Office Action, claims 1-32 and 52-88 are listed as pending, and claims 1-32 and 52-88 are listed as rejected.

The Examiner has maintained the rejection of claims 1-32 and 52-88 under 35 U.S.C.§112, second paragraph, for allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have amended claims 1, 52 and 75 to deleted the term "(C1-C6)" and incorporate the definition of "(C_1 - C_6)" from lines 19-12 on page 54 of the application as filed.

Based upon the foregoing, the rejection of claims 1-32 and 52-88 under 35 U.S.C.§112, second paragraph, for allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is obviated and should be withdrawn.

The Examiner has maintained the rejection of claims 1-32 and 52-88 under 35 U.S.C. §103(a) as allegedly being unpatentable over Altmann et al. (WO 97/49706). Applicants respectfully traverse this rejection. Applicants maintain the arguments presented in the Replies filed August 26, 2002, November 26, 2002, July 26, 2003, March 15, 2004, May 17, 2004, December 23, 2004, August 11, 2005 and October 6, 2005.

The Examiner alleges that "the reference teaches a generic group of substituted 7-amino-pyrrolo[3,2-d]pyrimidine derivatives which embraces applicants' claimed compounds". The Examiner points to Example 72 on page 35 as the closest prior art because it contains a 4-Ph-OH substituent over the 4-Ph-OPh group of the instant compound at R₁.

The Examiner alleges that "the reference teaches a generic group of substituted 7-amino-pyrrolo[3,2-d]pyrimidine derivatives which embraces applicants' claimed compounds". The Examiner points to Example 72 on page 35 as the closest prior art because it contains a 4-Ph-OH substituent over the 4-Ph-OPh group of the instant compound at R₁.

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The Examiner alleges that the reference teaches 4-amino-7H-pyrrolo[2,3-d]pyrimidin-5-yl compounds having an optionally substituted phenyl as the 5-substituent which is further attached to -A-R₅ wherein A is -NH-SO₂- and R₅ is optionally substituted phenyl, etc. The Examiner further states that the instant claim differs by reciting specific species that fall within the reference genus. It is well established that a prior art genus does not make a basis for a *prima facie* case of obviousness for a later genus because the species falls into the prior art genus. In re Baird, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994) ("The fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious"); In re Jones, 958 F2d 347, 350, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992).

The Examiner has not established by clear and convincing evidence that one of ordinary skill in the art would have been motivated to select example 72 out of the 107 compounds disclosed in Altmann et al. as a lead compound. <u>Yamanouchi</u>, 231 F.3d at 344; see also <u>Dillon</u>, 919 F.2d at 602 (finding that *prima facie* obviousness is established "where the prior art gives reason or motivation to make the claimed compositions"). In <u>In</u> re Baird, supra, the court found:

...the generic diphenol formula disclosed in Knapp contains a large number of variables, and we estimate that it encompasses more than 100 million different diphenols, only one of which is bisphenol A. While the Knapp formula unquestionably encompasses bisphenol A when specific variables are chosen, there is nothing in the disclosure of Knapp suggesting that one should select such variables.

In much the same way, the genus of Altmann encompasses thousand of compounds and like <u>In re Baird</u>, when specific variables are chosen the genus of Altmann overlaps with Applicants' genus. <u>In re Baird</u> further found:

The diphenols that Knapp specifically discloses to be 'typical,' 'preferred,' and 'optimum' are different from and more complex than bisphenol A, we conclude that Knapp does not teach or fairly suggest the selection of bisphenol A. See *In re Bell*, 991 F.2d 781, 26 U.S.P.Q.2d (BNA) 1529 (Fed. Cir. 1993).

Like Knapp, Altmann discloses preferred examples and on page 8 states "[t]he invention relates especially to the specific compounds described in the Examples and to salts hereof." The majority of the examples in Altmann contain a phenyl substituted at the 5-

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position with a simple moiety such as methoxy. The examples in Altmann teach away from Applicants' genus. By teaching away from Applicants' genus Altmann cannot suggest Applicants' genus. Applicants have disclosed a genus which is different from and more complex than that of Altmann.

As in <u>In re Baird</u>, the reference discloses a genus with a number of variables which encompass a large number of possible compounds. Again, like <u>In re Baird</u>, the reference does not provide any suggestion or motivation to arrive at exactly Applicants' genus. <u>In re Deuel</u>, 51 F.3d 1552, states:

...the question becomes whether the prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention. See In re Jones, 958 F.2d 347, 351, 21 USPQ2d 1941, 1944 (Fed Cir 1992), In re Dillon, 919 F.2d 688, 692, 16 USPQ2d 1897, 1901 (Fed. Cir 1990)(en banc) ("structural similarity between claimed and prior art subject matter,...where the prior art gives reason or motivation to make the claimed compositions, creates a prima facie case of obviousness")...In re Grabiak, 769 F.2d 720, 731-32 226 USPQ (Fed. Cir. 1985) ("In the case before us there must be adequate support in the prior art for the [prior art] ester/[claimed] thioester change in structure, in order to complete the PTO's prima facie case and shift the burden of going forward to the applicant." In re Lalu, 747 F.2d 703, 705, 223 USQ 1257, 1258 (Fed. Cir. 1984) ("The prior art must provide one of ordinary skill in the art the motivation to make the proposed molecular modifications needed to arrive at the claimed compound.").

One of ordinary skill in the art could select any number of variables and arrive at a genus different from Applicants' genus but which would also overlap with Altmann. The Examiner is using hindsight instead of pointing to the motivation that one would select precisely the right variables to arrive exactly at Applicants' genus based upon Altmann's disclosure. Merely because the genuses overlap does not make Applicants' genus obvious over Altmann. The chemical art is replete with patentable, overlapping genuses. The Examiner has not pointed out where and how Altmann suggests making the specific molecular modifications necessary to arrive exactly at Applicants' genus. Examiner has not made prima facie case of obviousness.

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The Examiner states "[t]he instant rejection is closer to <u>Susi</u> than <u>Baird</u> because in <u>Baird</u>, supra, the thrust of the invention of the prior art was away from bisphenol-A.". In In re Baird the court found:

...the generic diphenol formula disclosed in Knapp contains a large number of variables, and we estimate that it encompasses more than 100 million different diphenols, only one of which is bisphenol A.(emphasis added)

M.P.E.P. 2144.08 states "[t]here is no absolute correlation between the size of the prior art genus and a conclusion of obviousness...Thus, the mere fact that a prior art genus contains a small number of members does not create a *per se* rule of obviousness".

The fact that the genus of Altmann encompasses many thousands of compounds instead of the more than 100 million disclosed in Knapp does not make Applicant's genus obvious over Altmann. The thrust of Altmann is *away* from Applicants' compounds. The Examiner has only pointed to one example in Altmann which overlaps with Applicants' genus. So although in the instant case the reference discloses many thousands of compounds instead of the more than 100 million disclosed in Knapp, nonetheless there are a large number of compounds in Altmann that do <u>not</u> overlap with Applicant's genus.

In <u>In re Susi</u>, the court found "...the subject matter of appellant's claim 6 is very nearly within the generic teaching of Knapp." Further, the court found only one difference between the appellant's invention and Knapp. Applicant's genus differs in several respects from Altmann. If one were to place representatives of Applicant's genus and Altmann's genus side by side one would immediately see the differences, unlike <u>In re Susi</u>. Although the genus overlap, Altmann does not lead one in the direction of Applicant's invention.

.Based upon the foregoing, the rejection of claims 1-32 and 52-88 under 35 U.S.C. §103(a) over Altmann et al. (WO 97/49706) is obviated and should be withdrawn.

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If the Examiner believes that a telephone conference would advance the condition of the instant application for allowance, Applicants invite the Examiner to call Applicants' agent at the number noted below.

Respectfully submitted,

Jayle O'Brien

Date: <u>January</u> 24, 2006

Gayle B. O'Brien Agent for Applicants Reg. No. 48,812

Abbott Bioresearch Center 100 Research Drive Worcester, MA 01605 (508) 688-8053